

U.S. Department of the Interior Bureau of Land Management

**Environmental Assessment NV-040-07-048
July 2008**

Southwest Intertie Project Southern Portion

Location: Portions of Clark, Lincoln, White Pine Counties, Nevada
BLM Right-of-Way Grant NVN-85210

Applicant/Address: Great Basin Transmission, LLC
400 Chesterfield Center, Suite 110
St. Louis, Missouri 63017

U.S. Department of the Interior
Bureau of Land Management
Ely District Office
Phone: 775-289-1800
Fax: 775-289-1910



BLM Mission Statement

It is the mission of the Bureau of Land Management to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

ENVIRONMENTAL ASSESSMENT

For the:

**Southwest Intertie Project
Southern Portion
NV-040-07-048**

Bureau of Land Management

July 2008

TABLE OF CONTENTS

Section 1.0	Introduction and Purpose and Need	
1.1	Introduction.....	1- 1
	1.1.1 Background.....	1- 1
	1.1.2 ROW Amendment Application and Related NEPA Analysis	1- 2
1.2	Purpose and Need	1- 3
Section 2.0	Proposed Action and Alternatives	
2.1	Proposed Action	2- 1
	2.1.1 Harry Allen Substation Area	2- 1
	2.1.2 Thirtymile Substation	2- 1
2.2	Coyote Springs Realignment.....	2- 8
2.3	No Action Alternative	2-11
2.4	Alternatives Considered But Eliminated	2-11
	2.4.1 Transmission Line Alternatives.....	2-11
	2.4.2 Substation Alternatives	2-11
Section 3.0	Affected Environment for the Extension of the Right-of-Way to the Harry Allen Substation and for the Thirtymile Substation	
3.1	Introduction.....	3- 1
3.2	Biological Resources.....	3- 1
	3.2.1 Vegetation	3- 1
	3.2.2 Noxious Weeds and Invasive Species.....	3- 2
	3.2.3 Wildlife	3- 3
	3.2.4 Migratory Birds.....	3- 4
	3.2.5 Wild Horses and Burros.....	3- 5
	3.2.6 Threatened and Endangered Species/Special Status Species	3- 5
3.3	Cultural Resources.....	3- 6
	3.3.1 Right-of-Way Extension to the Harry Allen Substation	3- 6
	3.3.2 Thirtymile Substation	3- 6
3.4	Paleontological Resources	3- 7
	3.4.1 Right-of-Way Extension to the Harry Allen Substation	3- 7
	3.4.2 Thirtymile Substation	3- 8
3.5	Land Use, Recreation, and Access	3- 8
	3.5.1 Right-of-Way Extension to the Harry Allen Substation	3- 8
	3.5.2 Thirtymile Substation	3- 9
3.6	Visual Resources	3-10
	3.6.1 Right-of-Way Extension to the Harry Allen Substation	3-10
	3.6.2 Thirtymile Substation	3-10
3.7	Wildfire Management	3-11
	3.7.1 Right-of-Way Extension to the Harry Allen Substation	3-11
	3.7.2 Thirtymile Substation	3-11
3.8	Wilderness and Wild and Scenic Rivers.....	3-12
3.9	Prime and Unique Farmlands.....	3-12
3.10	Earth Resources.....	3-12
	3.10.1 Right-of-Way Extension to the Harry Allen Substation	3-13
	3.10.2 Thirtymile Substation	3-13

Table of Contents (continued)

3.11	Air Resources.....	3-14
3.11.1	Federal	3-14
3.11.2	State	3-14
3.11.3	Local	3-14
3.11.4	Right-of-Way Extension to the Harry Allen Substation	3-15
3.11.5	Thirtymile Substation	3-15
3.12	Hazardous Materials	3-15
3.12.1	Right-of-Way Extension to the Harry Allen Substation	3-15
3.12.2	Thirtymile Substation	3-15
3.13	Socioeconomics and Environmental Justice	3-15
3.13.1	Right-of-Way Extension to the Harry Allen Substation	3-16
3.13.2	Thirtymile Substation	3-16
3.14	Areas of Critical Environmental Concern.....	3-17
3.14.1	Right-of-Way Extension to the Harry Allen Substation	3-17
3.14.2	Thirtymile Substation	3-17
Section 4.0	Environmental Consequences for the Extension of the Right-of-Way to the Harry Allen Substation and for the Thirtymile Substation	
4.1	Introduction.....	4- 1
4.2	No Action Alternative	4- 1
4.3	Biological Resources.....	4- 1
4.3.1	Vegetation	4- 1
4.3.2	Noxious Weeds and Invasive Species.....	4- 2
4.3.3	Wildlife	4- 4
4.3.4	Migratory Bird Treaty Act	4- 4
4.3.5	Threatened and Endangered Species/Special Status Species	4- 5
4.4	Cultural Resources.....	4- 6
4.4.1	Right-of-Way Extension to the Harry Allen Substation	4- 6
4.4.2	Thirtymile Substation	4- 6
4.5	Paleontological Resources	4- 6
4.5.1	Right-of-Way Extension to the Harry Allen Substation	4- 6
4.5.2	Thirtymile Substation	4- 6
4.6	Land Use, Recreation, and Access	4- 6
4.6.1	Right-of-Way Extension to the Harry Allen Substation	4- 6
4.6.2	Thirtymile Substation	4- 7
4.7	Visual Resources	4- 7
4.7.1	Right-of-Way Extension to the Harry Allen Substation	4- 7
4.7.2	Thirtymile Substation	4- 7
4.8	Wildfire Management	4- 8
4.8.1	Right-of-Way Extension to the Harry Allen Substation	4- 8
4.8.2	Thirtymile Substation	4- 8
4.9	Earth Resources.....	4- 9
4.9.1	Right-of-Way Extension to the Harry Allen Substation	4- 9
4.9.2	Thirtymile Substation	4-10
4.10	Air Resources	4-10
4.10.1	Right-of-Way Extension to the Harry Allen Substation	4-10
4.10.2	Thirtymile Substation	4-11

Table of Contents (continued)

4.11	Hazardous Materials	4-11
4.11.1	Right-of-Way Extension to the Harry Allen Substation	4-11
4.11.2	Thirtymile Substation	4-11
4.12	Socioeconomics and Environmental Justice	4-11
4.12.1	Right-of-Way Extension to the Harry Allen Substation	4-12
4.12.2	Thirtymile Substation	4-12
4.13	Areas of Critical Environmental Concern.....	4-12
4.13.1	Right-of-Way Extension to the Harry Allen Substation	4-12
4.13.2	Thirtymile Substation	4-12
Section 5.0	Legislative Modifications for Coyote Springs Realignment	
5.1	Introduction.....	5- 1
5.2	Affected Environment	5- 1
5.2.1	Biological Resources	5- 1
5.2.2	Cultural Resources	5- 4
5.2.3	Paleontological Resources	5- 6
5.2.4	Land Use, Recreation, and Access	5- 6
5.2.5	Visual Resources.....	5- 8
5.2.6	Wildfire Management.....	5- 8
5.2.7	Wilderness and Wild and Scenic Rivers	5- 9
5.2.8	Prime and Unique Farmland.....	5- 9
5.2.9	Earth Resources	5- 9
5.2.10	Air Resources	5-10
5.2.11	Hazardous Materials.....	5-11
5.2.12	Socioeconomics and Environmental Justice	5-11
5.2.13	Areas of Critical Environmental Concern.....	5-12
5.3	Environmental Consequences.....	5-12
5.3.1	Biological Resources	5-13
5.3.2	Cultural Resources	5-15
5.3.3	Paleontological Resources	5-15
5.3.4	Land Use, Recreation, and Access	5-15
5.3.5	Visual Resources.....	5-16
5.3.6	Wildfire Management.....	5-16
5.3.7	Earth Resources	5-17
5.3.8	Air Resources	5-18
5.3.9	Hazardous Materials.....	5-18
5.3.10	Socioeconomics and Environmental Justice	5-18
5.3.11	Areas of Critical Environmental Concern.....	5-18
Section 6.0	Policy and Resource Updates	
6.1	Introduction.....	6- 1
6.2	Designated Critical Habitat for the Mojave Desert Tortoise.....	6- 1
6.2.1	Affected Environment	6- 1
6.2.2	Environmental Consequences.....	6- 2
6.3	Sage Grouse	6- 3
6.3.1	Affected Environment	6- 3
6.3.2	Environmental Consequences.....	6- 3

Table of Contents (continued)

6.4	Migratory Birds	6- 3
6.4.1	Affected Environment	6- 3
6.4.2	Environmental Consequences.....	6- 4
6.5	Noxious Weeds and Invasive Species	6- 4
6.5.1	Affected Environment	6- 4
6.5.2	Environmental Consequences.....	6- 5
6.6	Environmental Justice	6- 6
6.6.1	Affected Environment and Environmental Consequences	6- 6
6.7	Visual Resource Management Classifications	6- 7
6.7.1	Affected Environment	6- 7
6.7.2	Environmental Consequences.....	6- 7
6.8	Cultural Resources.....	6- 7
6.9	Tribal Consultation	6- 7
6.10	Threatened and Endangered Species/Sensitive Species	6- 7
6.10.1	Affected Environment	6- 7
6.10.2	Environmental Consequences.....	6- 8
6.11	Clark County Ozone Non-Attainment	6- 8
6.11.1	Affected Environment	6- 8
6.11.2	Environmental Consequences.....	6- 8
Section 7.0	Cumulative Impacts Assessment	
7.1	Cumulative Impacts Assessment	7- 1
7.1.1	Right-of-Way Extension to the Harry Allen Substation	7- 1
7.1.2	Thirtymile Substation	7- 5
7.1.3	Coyote Springs Realignment.....	7- 5
7.2	Existing and Planned Conditions.....	7- 5
7.2.1	Right-of-Way Extension to the Harry Allen Substation	7- 5
7.2.2	Thirtymile Substation	7- 5
7.2.3	Coyote Springs Realignment.....	7- 8
7.3	Past, Present, and Reasonably Foreseeable Actions	7- 9
7.4	Analysis of the Cumulative Effects	7-10
7.4.1	Biological Resources	7-10
7.4.2	Cultural Resources	7-12
7.4.3	Paleontological Resources	7-12
7.4.4	Land Use, Recreation, and Access	7-13
7.4.5	Visual Resources	7-14
7.4.6	Wilderness and Wild and Scenic Rivers	7-15
7.4.7	Wildfire Management.....	7-15
7.4.8	Earth Resources	7-15
7.4.9	Air Resources	7-16
7.4.10	Hazardous Materials.....	7-16
7.4.11	Socioeconomics and Environmental Justice	7-17
7.4.12	Areas of Critical Environmental Concern.....	7-17
7.5	Summary	7-17
Section 8.0	List of Preparers and Contributors.....	8-1
References	R-1

Table of Contents (continued)

Appendix A – Mitigation	
Introduction	A-1
Generic Mitigation Measures Table	A-2
Selectively Committed Mitigation Measures Table.....	A-3

Appendix B – Biological Opinion

LIST OF FIGURES

1	Project Area Map	2- 2
2	Harry Allen Substation Area.....	2- 3
3	Dry Lake Substation Siting Area	2- 4
4	Typical 500kV Transmission Line Tower	2- 5
5	Thirtymile Substation Area	2- 6
6	Robinson Summit Substation Siting Area	2- 7
7	Preliminary Thirtymile Substation Layout.....	2- 9
8	Coyote Springs/Aerojet Corridor Area.....	2-10
9	Harry Allen Substation Area – Area of Potential Cumulative Effect	7- 2
10	Thirtymile Substation Area – Area of Potential Cumulative Effect	7- 3
11	Coyote Springs/Project Corridor Area – Area of Potential Cumulative Effect	7- 4

LIST OF TABLES

3-1	Cultural Resource Sites in the Thirtymile Substation and Interconnection Area	3- 6
3-2	Wildland-Urban Interface Communities of Thirtymile Substation	3-12
5-1	Cultural Resource Sites in the Coyote Springs Area	5- 4
6-1	Total Surface Area Disturbance in Desert Tortoise Habitat, Acres	6- 2
6-2	Noxious Weed Species Found within Project Corridor.....	6- 5
7-1	Existing Conditions and Reasonably Foreseeable Future Actions.....	7- 6

SECTION 1.0

INTRODUCTION AND PURPOSE AND NEED

1.1 INTRODUCTION

1.1.1 Background

In 1994, a Record of Decision and Approved Land Use Plan Amendment (ROD/ALUPA) were issued by the U.S. Bureau of Land Management (BLM) for the Southwest Intertie Project (SWIP) (FR Doc. 94-30678, Filed 12-13-94), following the preparation and review of an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). The SWIP is a single-circuit, overhead, 500 kilovolt (kV) transmission line project. The project proponents were the Idaho Power Company (IPC) and the Los Angeles Department of Water and Power (LADWP).

In conjunction with the ROD/ALUPA, the BLM issued Right-of-Way (ROW) Grants (with serial numbers: IDI-26446, NVN-49781, UTU-73363) for the project on December 8, 1994, pursuant to the Federal Land Policy and Management Act. The ROW Grants were issued to IPC in segments, including a north-south segment of the project (Midpoint-to-Dry Lake), and an east-west segment of the project (Ely-to-Delta) which was immediately assigned to the LADWP and subsequently expired. The term of the ROW Grant for the Midpoint-to-Dry Lake segment was extended by the BLM in December 1999, and again in August 2004.

At the time of the 1994 SWIP EIS the Midpoint-to-Dry Lake segment (the north-south segment) was located in the Elko, Ely, and Las Vegas BLM Districts in Nevada. The BLM land use plans that were amended by the ROD/ALUPA to accommodate the Midpoint-to-Dry Lake segment of the project included the Wells Resource Management Plan (RMP) in the Elko District of the BLM, the Egan RMP and Schell Management Framework Plan (MFP) in the Ely District of the BLM, and the Caliente Resource Area MFP and Clark County MFP in the Las Vegas District of the BLM. In 2008 the BLM reorganized into a three-tier organization. The BLM offices associated with the SWIP are now the Elko District Office (includes the Wells Field Office), the Ely District Office (includes the Egan Field Office, the Schell Field Office, and the Caliente Field Office), and the Southern Nevada District (instead of the Las Vegas District Office, includes the Las Vegas Field Office). The RMP and MFP titles remain the same.

The final permitting and construction of the SWIP was not undertaken by IPC. In 2005, IPC entered into an exclusive arrangement with White Pine Energy Associates, LLC (WPEA), to complete the permitting, development, engineering, and construction of the SWIP, and authorized the BLM to work directly with WPEA toward this end. WPEA subsequently assigned its rights to its affiliate, Great Basin Transmission, LLC (Great Basin). In May 2008, BLM approved an assignment by IPC to Great Basin of a portion of the SWIP ROW. The assigned portion of the ROW includes the portion covered in this Environmental Assessment (EA), which has been re-designated as ROW Grant NVN-85210.

Due to the size of the SWIP project (approximately 520 miles in length), and because different components of the SWIP have independent utility, Great Basin proposes to complete the permitting and construction of the project in phases. Consistent with this phased approach, in June 2007, Great Basin submitted an application to the Public Utilities Commission of Nevada for a Utility Environmental Protection Act (UEPA) permit for the first phase of the project, known

both as the Harry Allen-to-Thirtymile Project and as the SWIP – Southern Portion. In this EA it is referred to as the SWIP – Southern Portion. The UEPA application review is pending.

The SWIP – Southern Portion begins at the existing Harry Allen Substation, located in Dry Lake, Nevada, approximately 20 miles northeast of Las Vegas, Nevada, and runs north to the proposed Thirtymile Substation approximately 18 miles northwest of Ely, Nevada, where it will interconnect with Sierra Pacific Power Company's existing Falcon-to-Gonder 345kV transmission line. The SWIP – Southern Portion traverses approximately 230 miles through parts of White Pine, Nye, Lincoln, and Clark counties in Nevada, and will consist of self-supporting, steel-lattice and steel-pole H-frame structures, placed approximately 1,200 to 1,500 feet apart.

The second phase, referred to as the SWIP – Northern Portion runs from the proposed Thirtymile Substation to IPC's Midpoint Substation near Shoshone, Idaho. A third possible phase, an approximately 34 mile subsection of the SWIP – Northern Portion, located between the Thirtymile Substation and a point just west of the proposed White Pine Energy Station (WPES), could be permitted and constructed separately from the remainder of the SWIP – Northern Portion, depending on the timing and outcome of the WPES permitting process. The WPES is a coal fired power plant proposed by WPEA, which at full build out would be approximately 1600 megawatts. The timing of these phases may occur in any order.

This EA is being prepared with respect to a proposed ROW grant amendment related solely to the SWIP – Southern Portion.

1.1.2 ROW Amendment Application and Related NEPA Analysis

In July 2007, IPC and Great Basin submitted an SF-299 seeking BLM approval of an amendment to ROW Grant NVN-49781 to accommodate two modifications for the SWIP – Southern Portion. In May 2008 IPC assigned its interest in this application to Great Basin and the BLM re-designated the applicable portion of the Grant specific to this project (NVN-85210). The two proposed modifications consist of (1) an extension of the ROW and 500kV transmission line for approximately 4 miles from the originally approved southern terminus, which was to be at the Dry Lake 500kV Substation (which was never constructed), to the now existing Harry Allen 500kV Substation in Clark County, and (2) a modification of the ROW Grant in the Robinson Summit area northwest of Ely in White Pine County, which would shift the location of the Robinson Summit Substation from its currently approved location, to a new site, referred to as Thirtymile Substation immediately to the west of the approved SWIP corridor, and approximately $\frac{3}{4}$ mile to the northwest of the currently approved site.

A Determination of NEPA Adequacy (DNA) was prepared by the BLM to evaluate the SWIP EIS with respect to these proposed modifications. The DNA also evaluated relocation of the ROW to the west side of U.S. Highway 93 in Coyote Spring Valley which had been mandated by Congress in the 2004 Lincoln County Conservation, Recreation, and Development Act (LCCRDA). The DNA determined that this EA should be prepared to assess the impacts of the proposed ROW modifications, the Coyote Springs Valley relocation, and also to address policy and resource updates associated with key environmental resources that may affect the project.

In summary, this EA includes analysis of:

- environmental impacts of Great Basin's proposed amendment to the SWIP ROW grant that would (1) extend the ROW approximately 4 miles southwest to the Harry Allen Substation, and (2) change the approved location of the substation northwest of Ely
- environmental impacts of a congressionally mandated shift of the ROW to the west side of U.S. Highway 93 in the Coyote Springs Valley area
- policy and resource updates enacted or adopted after the issuance of the ROW grant in 1994 with potential implications for the SWIP

1.2 PURPOSE AND NEED

The purpose of BLM's action is to make a decision on the use of public land for electrical transmission facilities that are necessary to construct and operate the SWIP – Southern Portion, which requires amendment of the existing ROW grant. The need for BLM action arises from the Federal Land Policy and Management Act (FLPMA), which requires BLM to respond to applications for ROW grants and amendments. FLPMA establishes a multiple use framework for management of public land which includes use for energy transmission facilities. The Energy Policy Act of 2005 and the President's Energy Policy also recognize the important role of the use of public land for electrical transmission facilities. In general, BLM's management objective is to meet public needs for use of BLM-managed land while avoiding or minimizing adverse impacts to other resource values.

The ROW modifications evaluated in this EA are necessary for the construction and operation of the SWIP 500kV transmission line. The extension of the ROW at the southern terminus of the project is needed in order to allow the SWIP to interconnect with the existing transmission grid. The modification of the grant in the Robinson Summit area will provide engineering and environmental advantages and better accommodate the interconnection with, and the crossing of, the Falcon-to-Gonder 345kV line that now passes through this area.

The Proponent's objective for the SWIP transmission line itself is to interconnect existing utility grids in northern and southern Nevada, increase regional transmission system reliability, and provide transmission service for generation facilities including renewable energy projects.